

09/977506

## ABSTRACT

### ENERGY ABSORBER

An energy absorber for absorbing energy of a vehicle or component of a vehicle or occupant of the vehicle in a crash situation so as to allow relatively gradual deceleration of the vehicle, component or occupant, the energy absorber including a first part, a second part and an elongate deformable member secured to the first part and extending through a deforming arrangement carried by the second part, whereby said elongate deformable member normally acts as a tie or strut between said first part and said second part but wherein the arrangement is such that, when the force acting between said first part and second part in a predetermined direction exceeds a predetermined amount, said elongate deformable member is thereby forced progressively through said deforming arrangement as the distance between said first part and said second part changes and the deformable member is thereby forced to undergo plastic deformation, whereby energy is absorbed, and wherein said deforming arrangement is such as to effect such plastic deformation substantially without changing the material cross sectional area of the deformable member.